The Philosophy of Food. Recipes Between Arts and Algorithms

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This special issue offers an essay of the current research on theoretical aspects concerned with the philosophy of food, focusing on recipes. The topic is somewhat new to philosophical quarters. To introduce it, in the coming pages we provide (\$1) a cursory map of the current debates in the philosophy of food followed (\$2) by a review of the core methodological issues they raise. Then, in \$3, we specify why recipes comprise an important chapter for philosophers working on food. Finally, in \$4 we introduce the essays of this special issue.

1. Philosophy and Food

Philosophy has too often dismissed food as a trivial, humoral, and definitely uninteresting topic (Curtin & Heldke 1992; Telfer 1996; Korsmeyer 1999; Perullo 2016). Over the past few decades, though, more and more philosophers have been intrigued by the wealth of intellectually challenging and socially engaging issues raised by food. To what extent dietary choices reflect ethical ones? What is an authentic food? When is a food natural? These are only a few samples of an astounding amount of questions that can be and have been raised.

The path we follow to address such an increasing body of research is by dividing the field into three main camps: production; consumption; and representation. Since each of these camps involves both theoretical problems and ethical and political concerns, our map of the debate will show how those questions are intimately intertwined.

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In the first camp we find issues concerned with the systems of food production. A theoretical work may begin by inquiring what is a food system, what are its identity conditions, and how its parts compose it. Additional questions, instead, would focus on whether different food systems raise different ethical concerns and obligations, e.g., farming and hunting with respect to eating meat (e.g., Kowalsky 2010), or whether local food systems are morally and politically better than non-local ones (e.g., Noll & Werkheiser 2018). These issues, in turn, suggest an interrogation into the hierarchical relationships between communities, places, and all other components of the food system (e.g., Thompson 2010; Sandler 2015: 4-44). The key point is that the political and ethical debates are best carried out alongside a conceptual work on the basic notions, such as communities, relations, and composition.

The second camp studies questions related to the act of eating and to food consumption. Sample topics are vegetarianism (e.g., Bramble & Fischer 2015; Chignell, Cuneo, Halteman 2016), hunger and appetite (Borghini 2017; Borghini & Serpico 2021), morally preferable diets (Navin 2018), eating disorders (Giordano 2005), and obesity (Thompson 2015: 80-105; Barnhill & Bonotti 2019). Also under the scope of this camp falls the philosophy of drinking and of beverages, which has devoted special attention to wine consumption (see Smith 2006, Scruton 2009, and Todd 2010). Thinking about consuming foods and beverages paves the way for reconsidering related normative issues. For instance, whether eating disorders are also mental disorders, whether the empirical and terapeutic methodologies employed are scientifically and conceptually robust, whether the ongoing categories well serve to carve the nature of the disorders (see the *locus classicus* Giordano 2005). All those questions, even if theoretically bounded, bring along with themselves ethical issues related to the doctor-patient relationship, the role of values in scientific research, the presence of biases in our taxonomies, questions of autonomy, and so on.

Finally, the third camp regards the ways in which food is represented in various forms of communication. For instance, by labels entrusted with featuring its properties and effects, e.g., "healthy food," "natural food," "local food," and so on. General theoretical questions concern whether those labels carve types of food out of nature or they construct the represented food by conferring or projecting human dependent categories on some edible stuff. Other questions within this third camp, instead, pertain to forms of representation that occur within mainstream media, where a philosophical

approach can (and arguably ought to) be fruitfully applied; consider, for instance, the pervasive questions of justice related to gender oppression through categories of taste and consumption (e.g., Adams 1990; Korsmeyer 2004: 84-103) or the use of food representations to underscore extremist political positions (e.g., Forchtner 2019).

2. Questions of Method

In the previous section we laid out a wide range of topics that scholars contributing to the philosophy of food have recently taken up. These topics often raise significant methodological problems, which we are now going to briefly summarize.

A first set of methodological questions regards how to apply philosophy to the specific subject matter of food. These questions run parallel to cognate fields such as philosophy of art, biology, medicine, and sport. Should philosophy deal with universal philosophical questions, which the specific subject matter would exemplify, or should philosophy instead address problems as they emerge from the subject matter, regardless of how and whether they can be subsumed under broader philosophical questions? For instance, should philosophy be concerned with the universal question What is justice? and discuss issues concerning food justice as its instances or, rather, should investigations into the nature of food justice be carried forward with some degree of autonomy with respect to broader issues of justice? The two options outlined correspond to two different attitudes toward the application of philosophy: one one hand, a more pragmatist approach, according to which concepts are contextually linked to specific problems, e.g., there cannot be given a definition of justice disengaged from specific endeavors or movements; on other hand a more general approach, according to which philosophy should look for general principles, e.g., one definition of justice valid sub specie aeternitatis. When it comes to food, one may be tempted to say that the approach may depend on the specific issues that are under consideration. For instance, while the concept of recipe seems to be more general, the concept of dinner seems instead linked to specific contextual habits.

A second set of methodological questions regards how the key concepts should be dealt with and understood by philosophy. Two different methodologies, usually considered as poles apart, emerge from the debate: conceptual analysis, i.e., very roughly the full description of a concept (Lawrence and Margolis 2003) and conceptual engineering, i.e., very roughly the revision of a concept (Burgess, Cappelen, and Plunkett 2020). The camp of food might show—alongside other camps such as theories of gender and race (Haslanger 2012)—why and how conceptual analysis and engineering can be integrated for envisaging better food concepts than the ones currently in use. Thus, philosophers should analyze food concepts within a broader conceptual web; yet, at the same time, they should also try and render the concepts more robust in light of specific aims. When it comes to concepts, then, a philosophical methodology consists of two moments: (i) teasing out assumptions, implications, and goals of a concept as well as (ii) redesigning the concept to better accomplish its tasks.¹

A further difficulty arises due to the fact that food concepts are relevant not only within the philosophical room. In this sense, it is arguable that a philosophy of food cannot be carried forward by means of so-called "armchair philosophy" and must embrace empirical and socially engaged methods, which take into account, for instance, the microbiological study of food composition in a diachronic perspective, the historical analysis of recipes and documents, the sociological surveys on users' and producers' opinions, the economic and political issues surrounding food production and consumption, and so on.

One last important methodological note is that philosophical studies on food are at present carried forward by scholars working within heterogeneous philosophical perspectives, e.g., analytic, continental, or historicist (several recent collective works bear witness to this; see e.g. Kaplan 2012; Chignell, Cuneo, Halteman 2016; Doggett, Budolfson, Barnhill 2018; and this special issue too). The topic of food is, thus, well positioned to bridge the historical divide between different traditions.

3. Recipes and the Philosophy of Food

The current special issue showcases the key features we attributed in the previous sections to the contemporary research on the philosophy of food: it exemplifies a variety of approaches to questions of method as well as content via the specific lens of recipes.

Recipes are complex social artefacts, weaving together culture, politics, and socio-economic meanings with metabolism and physiology. They are the bedrock of culinary cultures. Through recipes the knowledge of how to cook

¹ See Timmermann & Robaey 2016 for some definitory work and Borghini, Piras, Serini 2020 for an application of analytic metaphysics to some food concepts.

safe, nutritious and tasty dishes spreads across generations, cultures, and regions. We talk about food in terms of recipes, and we cook based on recipes (or our own inventions or modifications of them). Recipes represent cultures, environments, and norms (Floyd and Forster 2010b), and moreover they have been often used by those who have been silenced by society for raising their voices (Leonardi 1989), e.g., women, minorities, immigrants.

As for philosophy, recipes serve to rehearse questions that are central to several subdisciplines, such as social ontology (recipes as conventions or institutional acts), epistemology (recipes as protocols), aesthetics (recipes as artworks). Until a short time ago, however, we lacked a proper theoretical grasp on recipes. Part of such tasks has been recently pursued by some scholars (Heldke 1987; Borghini 2015; Borghini & Engisch 2021). Nevertheless, there are still two major gaps in the philosophical literature that we aim to fill with this special issue:

- (i) There is no systematic contribution to the relations between recipes and other forms of human activities. Particularly instructive for a public useful understanding of recipes is to debate how recipe-making compares to forms of major and minor arts as well as to algorithmic sets of instructions employed in technical fields such as engineering, medicine, or biochemistry.
- (ii) To be needed is also a framework through which adequately express questions and positions that drive the public debate concerning recipes. Such a framework should be coupled with contributions from natural and social sciences (e.g., Floyd and Forster 2010a), while devising principled ways to address and resolve normative concerns.

4. The Issue

The current special issue contains twelve papers, which cut across traditional philosophical fields, such as metaphysics, aesthetics, epistemology, philosophy of cognitive science, and ethics. We can group the papers into two clusters, based on the questions they take up. The first cluster comprises papers that directly discuss whether recipes are either forms of art or algorithms. The second cluster includes papers that deal with recipes as part of a broader philosophical agenda.

First Cluster: Recipes Between Art and Algorithm

In their paper, Baronti, Corti, Lanfredini, and Tuccini, address the first question on whether making recipes is akin to write and run an algorithm from an interesting angle: can recipes be formalized as programs? And, thus, can autonomous robots execute recipes? As a matter of fact, autonomous robots proliferate both in factories and private kitchens. In fact, companies often formalize recipes as programs. However, everyday recipes, i.e., recipes created and performed by domestic cooks in domestic environments, are irreducible to programs inasmuch as they are partly determined by the environment, the perception and the personal experience of the performer.

Questions like whether recipes can be programs are triggered by scientific approaches to cooking. Particularly, in the last thirty years, a specific form of scientific inquiry, molecular gastronomy, i.e., the study of the molecular phenomena occurring in cooking, has begun to take hold in both scholar and professional culinary domains, while it has rarely been studied from a philosophical point of view. Donati fills this gap by providing a fully-fledged metaphysical framework of molecular gastronomy resting on a dispositional interpretation of cooking. According to her, taking cooking, and the underlying chemical and physical processes, as a network of dispositions and interactions between them has more exhaustive explanatory powers than rival metaphysical models of science.

How to deal with scientific approach to recipes is also one of the crucial points of Serpico, Amoretti, and Frixione. They focus on the high variability displayed by cocktails execution, whose recipes however are fixed by internationally recognized standards and nomenclature. How to accomplish those standards while also leaving room for individual creativity? They provide a new conceptual scheme for recipes that builds upon the notion of "quality dimensions" that, once it is respected, can admit slight variability in ingredients and procedures.

Scientific approaches to recipes, such those just summarized, seem to be at odds with individual creativity which is instead one of the crucial dimensions of cooking. Engisch addresses precisely this topic by arguing that creativity is the intentional act of adding valuable things to the world, drawing on the work of Boden 2004. According to Engisch, however, some creative efforts are more valuable than others, as a careful and value-laden analysis of the recipes domain can show. He argues for his thesis by means of a thorough examination of a celebrated example: the Noma in Copenhagen headed by its chef René Redzepi.

Creativity, beyond being only a matter of individual effort, is often triggered by contextual conditions which, as Baldini points out in his paper, while preventing the expected result for, say, technical failures or the missing of an ingredient, could however deliver nice surprises. It is what Baldini calls imperfectionism in cooking which rests on mistakes, imprecision, or improvisation due to a variety of factors. Imperfect, or as he calls them "instaneouns," recipes resemble graffiti making process in that their imperfection rather than flaws, are merits which express the creativity of the cook/writer. This well shows that aesthetic relevant aspects of recipes can be also put forward by means of comparing it with other forms of art. Bertinetto goes in the same direction with his contribution by claiming that recipes, ingredients and dishes closely resemble the basic components of music. As he argues, musical works can be seen as recipes, while notes, scales, intervals, arpeggios, pauses, and so on are their ingredients. Singular performances are the concrete instatiations of musical works as well as dishes are concrete instatiations of recipes. The analogy goes that who composes the musical work is akin to who creates the recipe, while who performs the musical work is like the cook who prepares the dish following the recipe.

Second Cluster: Recipes and Philosophy

Beyond the relation between arts and algorithms, recipes are still in need of a more general theoretical treatment. The first paper of our issues that goes in this direction is by Borghini and Gandolini, who tackle the issue of providing a more precise ontology of recipes by offering a four-fold classification based on the relationship between recipes and their authors. The taxonomy includes: (i) recipes with multiple authors; (ii) recipes protected by consortia; (iii) branded recipes; and (iv) signature recipes.

Likewise, Bacchini raises ontological complexities related to the identity of recipes. According to him, culinary works are not undergirded by a monist ontology. Instead, he argues that the ontology of culinary works is threefold. Some culinary works are concrete particulars; some others are types, some of which, in turn, are determined by only one recipe, while others bring about a larger and possibly infinite number of recipes.

Ontological issues regarding food, cooking, and recipes can also be addressed by taking into account individual examples. From a phenomenologically informed perspective, van der Meulen explains the ontological relationship between nature and culture by analyzing in depth the cuisine of a restaurant, *Elementary* headed by the Swiss avantgarde and Michelin-starred chef Stefan Wiesner. His cuisine, van der Meule argues, raises particularly instructive lessons for philosophers who are looking for a clear perspective on the old debate over nature and culture by a contextual understanding of its aesthetic significance.

Whether recipes have an aesthetic value, however, is part of the broader question of whether food can be a form of art and apt to be fully aesthetically judged. Fox addresses this topic by taking recipes as a paradigm of aesthetic object in the continuous between art and non-art. He reads the aestheticity of recipes by the light of late Wittgenstein stressing that cooking following recipes is the key for deeper aesthetic experiences.

Tuminello, in his paper, widens the problem and wonders precisely about one of the most fundamental ontological questions when it comes to food, namely whether there is a difference between food and drugs and how specific items can be classified accordingly. He surveys two different legal definitions: one delivered by the US Food & Drug Administration and the other by India's Ministry of AYUSH. The aim is to show that the two legal systems are underlied by two different ontologies: one which relies on a dichotomy between food and drug and another which rests on a more nuanced continuity between the two poles.

The link between recipes and science is not only related to their chemical makeup but also to the procedures that underscore the labor. Boem tackles this issue by asking whether laboratory protocols are recipes, taking the example of molecular biology. According to Boem, experimental protocols, even when highly formalized, should be interpreted as recipes. In fact, both recipes and protocols match objective and subjective constraints in order to deliver an outcome. This is witnessed by the observation of different scientific research programs which can be interpreted as different cookbooks, each of which contains different recipes made by the same ingredients. In making this comparison and by emphasizing the role of subjective constraints, Boem touches upon the role of creativity in making recipes, addressing from a different angle a question underlying several of the papers within the issue.

Finally, this issue also contains a critical review by Samantha Noll of the brand new *The Routledge Handbook of Food Ethics* edited by Rawlinson and Ward. Noll summarizes and critically presents the papers of the volume focusing on the theoretical issues raised by the authors.

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